

Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the application.

Please amend claim 26 as shown.

Claims 1-25. (cancelled).

26. (currently amended): A lithium secondary battery comprising

(a) a cathode comprising a complex metal oxide of at least one metal selected from the group consisting of cobalt, manganese, nickel, chromium, iron and vanadium with lithium,

(b) an anode comprising a carbonaceous material having a graphite-type crystal structure having a lattice spacing (d_{002}) of the lattice face (002) of ~~about~~ 0.335 to ~~about~~ 0.340 nanometers and

(c) a non-aqueous liquid electrolyte comprising (i) a non-aqueous solvent, (ii) an electrolyte salt comprising LiBF_4 dissolved therein and (iii) 0.01 to 20% by weight, based upon a total weight of the electrolyte, of divinyl sulfone,
wherein during charging of the battery, the divinyl sulfone forms a film at a surface of the carbonaceous material.

27. (previously presented): The lithium secondary battery as claimed in claim 26, wherein said non-aqueous solvent comprises 5 - 50% by volume of a cyclic carbonate, 5 - 75% by volume of a cyclic ester and 0 - 70% by volume of a linear carbonate.

28-29. (cancelled).

30. (previously presented): The lithium secondary battery as claimed in claim 26, wherein the content of the divinyl sulfone is 0.1 to 10% by weight, based upon the total weight of the electrolyte.

31. (previously presented): The lithium secondary battery as claimed in claim 27, wherein the cyclic carbonate comprises at least one member selected from the group consisting

of ethylene carbonate (EC), propylene carbonate (PC) and butylene carbonate (BC).

32. (previously presented): The lithium secondary battery as claimed in claim 27, wherein the cyclic ester comprises at least one member selected from the group consisting of γ -butyrolactone and γ -valerolactone.

33. (previously presented): The lithium secondary battery as claimed in claim 27, wherein the linear carbonate comprises at least one member selected from the group consisting of dimethyl carbonate (DMC), methylethyl carbonate (MEC), diethyl carbonate (DEC), methylpropyl carbonate (MPC), butylmethyl carbonate (BMC), methylisopropyl carbonate (MIPC), isobutylmethyl carbonate (IBMC), sec-butylmethyl carbonate (SBMC) and tert-butylmethyl carbonate (TBMC).

34. (cancelled).